REQUEST FOR PROPOSAL

COUNTY OF SAN BERNARDINO PURCHASING DEPARTMENT

Materials and/or Services: Structure Clothing

To Be Delivered To: County of San Bernardino

Fire Department 2824 East W Street

San Bernardino, CA 92408

Date: December 4, 2008

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Submit each individual proposal in separate sealed envelope with proposal number marked on outside to:

County Purchasing Agent 777 East Rialto Avenue San Bernardino, CA 92415-0760 BEFORE: Monday, December 29, 2008, 3 PM

For further information, call: Zachary L. Avey

Deputy Purchasing Agent

Proposal No. K-46

(909) 387-2070

INSTRUCTIONS AND CONDITIONS

- 1. All prices and notations must be typewritten or printed in ink. No erasures permitted. Mistakes may be crossed out and corrections made adjacent, and must be initialed in ink by person signing quotation.
- 2. State brand, or make, on each item. If quoting an article exactly as specified, the words "or equal" must be stricken out by the vendor. If quoting on other than make, model or brand specified, the manufacturer's name and the catalog number must be given, or descriptive cut and information attached to the quotation.
- 3. Quote on each item separately. Prices should be stated in units specified herein.
- 4. Each quotation must be in separate sealed envelope with proposal number on outside, and must be received by County Purchasing Agent, 777 East Rialto Avenue, San Bernardino, CA 92415-0760 no later than the hour and day specified hereon, at which time it will be publicly opened and read.
- 5. Time of delivery is a part of the consideration and must be stated in definite terms, and must be adhered to. If time varies on different items, the vendor shall so state in the column provided, opposite each item.
- 6. Terms of less than 30 days for cash discount will be considered as net.
- 7. All quotations must be signed with the firm's name and by a responsible officer or employee. Obligations assumed by such signatures must be fulfilled.
- 8. Unless otherwise definitely specified, the prices quoted herein do not include California Sales or Use Tax. For questions regarding taxes contact the State of California Franchise Tax Board.
- 9. No charge for packing, drayage, or for any other purpose will be allowed over and above the prices quoted on this sheet.
- 10. The right is reserved, unless otherwise stated, to accept or reject any or all quotations, or any part thereof, either separately or as a whole, or to waive any informality in a proposal.
- 11. The County recognizes that price is only one of several criteria to be used in judging a product or service, and the County is not legally bound to accept the lowest quote.
- 12. Samples of items, when required, must be furnished free of expense to the County; and if not destroyed by tests, will upon request be returned at vendor's expense.
- 13. In case of default by the vendor, the County of San Bernardino may procure the articles or service from other sources and may deduct from unpaid balance due the vendor, or may collect against the bond of surety, or mail bill for excess costs so paid, and the prices paid by the County of San Bernardino shall be considered the prevailing market prices paid at the time such purchase is made.
- 14. Cost of transportation, handling, and/or inspection on deliveries, or offers for delivery, which do not meet specifications, will be for the account of the vendor.

- 15. The vendor shall hold the County of San Bernardino, its officers, agents, servants and employees, harmless and defend same from liability of any nature or kind on account of use of any copyright, or uncopyrighted composition, secret process, patented or unpatented invention, article, or appliance furnished or used under this quotation.
- 16. Neither party will be held liable for failure or delay in fulfillment if hindered or prevented by fire, strikes, or Acts of God. (Force Majeure)
- 17. Quotations are subject to acceptance per the terms enclosed in the proposal package..
- 18. Verify your quotations before submission, as they cannot be withdrawn or corrected after being opened.
- 19. RETURN THIS SHEET WHETHER OR NOT YOU QUOTE A PRICE. If you do not quote, state your reason; otherwise your name may be removed from the mailing list.
- 20. Accounts paid for transportation of property to the County of San Bernardino are exempt from Federal Transportation Tax. An exemption certificate is not required where the shipping papers show the consignee as San Bernardino
- County, as such papers may be accepted by the carrier as proof of the exempt character of the shipment.
- 21. To be considered, each vendor must have an approved Vendor Application on file with the Purchasing Department. Vendors must register online through the County Website at http://www.sbcounty.gov/purchasing/.
- 22. The Vendor agrees to comply with Executive Orders 11246, 11375, 11625, 12138, 12432, 12250, Title VII of the Civil Rights Act of 1964, the California Fair Employment Practice Act, Equal Employment Opportunity, San Bernardino County Emerging Small Business Enterprise program, and other applicable Federal, State, and County laws, regulations, and policies relating to equal employment and contracting opportunities, including laws and regulations hereafter enacted. The articles covered by the quotation must conform with safety orders of OSHA, CALOSHA and/or NIOSHA, and OSH-POD.
- 23. Assignment of the contract by the vendor to other suppliers/contractors must be approved by the Purchasing Agent in writing.
- 24. Prevailing Wages: Where labor is required for public work as a part of any requirements covered by this request for proposal, pursuant to the provisions of the Labor Code of the State of California, contractor shall pay no less than those minimum wages.
- 25. Conflict of Interest: Your signature hereon certifies that no County employee, whose position in the County service enables them to influence any award of your offer or any competing offer, shall have any direct or indirect financial interest in any transaction resulting from this request for proposal.
- 26. Vendors making delivery or providing services on County premises shall carry liability insurance and Worker's Compensation coverage in accordance with the County's Standard Practice requirements.

IMPORTANT: Place signed proposal in envelope, **seal** envelope and show **proposal number** on outside. Return proposal to the County Purchasing Agent, 777 East Rialto Avenue, San Bernardino, CA 92415-0760
PRICES QUOTED F.O.B. DESTINATION UNLESS OTHERWISE STATED.

The following must be filled in by the contractor in submitting his proposal:

Date		Company	
Delivery will be made in	_days	Address	
from receipt of order unless otherwise noted. Cash Discount Terms		City & State	Zip
Signed By		Telephone No. (

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A. STANDARD TERMS AND CONDITIONS

1.0 IMPROPER CONSIDERATION:

Vendor shall not offer (either directly or through an intermediary) any improper consideration such as, but not limited to, cash, discounts, service, the provision of travel or entertainment, or any items of value to any officer, employee or agent of the County in an attempt to secure favorable treatment regarding the award of this proposal.

The County, by written notice, may immediately terminate any contract resulting from this proposal process if it determines that any improper consideration as described in the preceding paragraph was offered to any officer, employee or agent of the County with respect to the proposal and award process. This prohibition shall apply to any amendment, extension or evaluation process once a contract has been awarded.

Vendor shall immediately report any attempt by a County officer, employee or agent to solicit (either directly or through an intermediary) improper consideration from Vendor. The report shall be made to the supervisor or manager charged with supervision of the employee or to the County Administrative Office.

In the event of a termination under this provision, the County is entitled to pursue any available legal remedies.

2.0 INACCURACIES OR MISREPRESENTATIONS:

If in the course of the RFP process or in the administration of a resulting contract, County determines that Vendor has made a material misstatement or misrepresentation or that materially inaccurate information has been provided to County, Vendor may be terminated from the RFP process or in the event a contract has been awarded, the contract may be immediately terminated.

3.0 EMPLOYMENT OF FORMER COUNTY OFFICIALS:

Vendors are required to provide information on former County of San Bernardino administrative officials (as defined below) who are employed by or represent your business. The information provided must include a list of former County administrative officials who terminated County employment within the last five years and who are now officers, principals, partners, associates or members of the business. This list should also include the employment and/or representative capacity and the dates these individuals began employment with or representation of your business.

For purposes of this section, "County administrative official" is defined as a member of the Board of Supervisors or such officer's staff, County Administrative Officer or member of such officer's staff, County department or group head, assistant department or group head, or any employee in the Exempt Group, Management Unit or Safety Management Unit.

Failure to provide this information may result in the response to the Request for Proposal being deemed non-responsive.

4.0 DISCLOSURE OF CRIMINAL AND CIVIL PROCEEDINGS:

The County reserves the right to request the information described herein from the vendor selected for contract award. Failure to provide the information may result in a disqualification from the selection process and no award of contract to the vendor. The County also reserves the right to obtain the requested information by way of a background check performed by an investigative firm. The selected vendor also may be requested to provide information to clarify initial responses. Negative information provided or discovered may result in disqualification from the selection process and no award of contract.

The selected vendor may be asked to disclose whether the firm, or any of its partners, principals, members, associates or key employees (as that term is defined herein), within the last ten years, has been indicted on or had charges brought against it or them (if still pending) or convicted of any crime or offense arising directly or indirectly from the conduct of the firm's business, or whether the firm, or any of it partners, principals, members, associates or key employees, has within the last ten years, been indicted on or had charges brought against it or them (if still pending) or convicted of any crime or offense involving financial misconduct or fraud. If the response is affirmative, the vendor will be asked to describe any such indictments or charges (and the status thereof), convictions and the surrounding circumstances in detail.

In addition, the selected vendor may also be asked to disclose whether the firm, or any of its partners, principals, members, associates or key employees, within the last ten years, has been the subject of legal proceedings as defined herein arising directly from the provision of services by the firm or those individuals. "Legal proceedings" means any civil actions filed in a court of competent jurisdiction, or any matters filed by an administrative or regulatory body with jurisdiction over the firm or the individuals. If the response is affirmative, the vendor will be asked to describe any such legal proceedings (and the status and disposition thereof) and the surrounding circumstances in detail.

For purposes of this provision "key employees" includes any individuals providing direct service to the county. "Key employees" do not include clerical personnel providing service at the firm's offices or locations.

5.0 DISPUTES RELATING TO PROPOSAL PROCESS AND AWARD:

In the event a dispute arises concerning the proposal process prior to the award of the contract, the party wishing resolution of the dispute shall submit a request in writing to the Director of Purchasing. Vendor may appeal the recommended award or denial of award, provided the following stipulations are met:

- a. Appeal must be in writing.
- b. Must be submitted within ten (10) calendar days of the date of the recommended award or denial of award letters.

An appeal of a denial of award can only be brought on the following grounds:

- a. Failure of the County to follow the selection procedures and adhere to requirements specified in the RFP or any addenda or amendments.
- b. There has been a violation of conflict of interest as provided by California Government Code Section 87100 et seq.
- c. A violation of State or Federal law.

Appeals will not be accepted for any other reasons than those stated above. All appeals must be sent to:

Laurie Rozko, Interim Director County of San Bernardino Purchasing Department 777 E. Rialto Avenue San Bernardino, CA 92415-0760

6.0 PARTICIPATION:

The County desires that the municipalities, school districts, and other tax districts within the state of California, may at their option and through the County Purchasing Agent avail themselves of the contract resulting from this proposal. Upon notice in writing, the Vendor agrees to the extension of the terms of a resultant contract with such Governmental bodies as though they have been expressly identified in this proposal, with the provision that:

- a. Such Governmental body does not have and will not have in force any other contract for like purchases.
- b. Such Governmental body does not have and will not have under consideration for any other contract for like purchases.
- c. Such Governmental body shall make purchases in it's own name, make payment direct to the Vendor, and be liable directly to the vendor, holding the County harmless there of.

7.0 ELECTRONIC FUNDS TRANSFERS:

Vendor shall accept all payments from the County via electronic funds transfer (EFT) directly deposited into the Vendor's designated checking or other bank account. Vendor shall promptly comply with directions and accurately complete forms provided by the County required to process EFT payments.

8.0 LOCAL PREFERENCE POLICY:

The County of San Bernardino has adopted a preference for vendors whose principle place of business is located within the boundaries of the County. A five percent (5%) preference may be applied prior to approval of any purchase or acquisition of services, equipment, goods, or supplies.

For purposes of the application of the local preference policy (County Policy 11-12), "principal place of business" is defined as the vendor's main office (or headquarters) or a major regional office. A "major regional office" is defined as a business location apart from the vendor's main office (or headquarters) which:

- a. Has been issued a business license, if required, and has been established and open for a minimum of six months prior to the date that the approval authority authorizes the circulation of an RFP/RFB/Quote for any contract, agreement, or purchase order to which it responds;
- b. Can demonstrate on-going business activity in the field of endeavor on which the Vendor is proposing, from that office during the preceding six months; and
- c. Has a minimum of twenty-five percent (25%) of the vendor's full time management employees and twenty-five percent (25%) of its full time regular employees working from the County of San Bernardino location(s).

The County's Local Preference Policy means for example, if two Vendors are responding to this RFP and if quality, service and ability to meet the County's needs are equal, County staff must determine if one of the Vendors is a local vendor. If one of the Vendors is a local vendor, and its quoted price or cost for services, equipment, goods or supplies does not exceed five percent (5%) of the other vendor's quoted price or cost, unless it is determined that an exemption applies, staff may recommend the local vendor for the contract award.

SPECIFICATIONS PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING		VENDOR COMPLIES	
	YES	NO	
THIS SPECIFICATION IS BASED ON ONE MANUFACTURER'S DESIGN. THE INTENT OF THE DEPARTMENT IS NOT TO LIMIT OR ELIMINATE PROPOSALS BUT TO START WITH A BUILDABLE SET OF SPECIFICATIONS.			
GENERAL INFORMATION The Vendor is to provide four (4) proposal copies, the original "Wet signature" copy and three (3) copies marked "Copy" and numbered. All copies must have all of the information contained in or attached to the "wet signature" copy. All copies are to be stapled to prevent loss or mixing. The County will not be responsible for lost or misplaced attachments. Proposals must be submitted on the format provided. NO EXCEPTIONS.			
The Vendor must indicate their compliance with these specifications by marking "YES" or "NO" in the appropriate column for each paragraph of this specification. Indicating "YES" to a paragraph will mean full compliance; indicating "NO" will mean an exception is being taken. All exceptions must be fully explained on a separate page, titled "Exceptions", giving reference to the page and paragraph where the exception is being taken. Simply state your exception and support your recommendation. Failure to comply with this requirement may result in the proposal being rejected.			
SCOPE This specification defines the minimum requirements for blood-borne pathogen resistant (BPR) firefighter personal protective equipment (PPE) to provide limited protection to fire fighters against adverse environmental effects during structural fire fighting operations and certain other emergency operations where there is a threat of fire or where certain physical hazards are likely to be encountered, such as during non-fire-related rescue operations, emergency medical operations, and victim extraction, as defined by NFPA 1971, Standard on Protective Ensemble for Structural Fire Fighting, 2007 Edition (hereinafter referred to as NFPA 1971.			
REQUIREMENTS Protective jackets and trousers manufactured to this specification shall, meet or exceed the requirements set forth in NFPA 1971 Protective Clothing for Structural Fire Fighting, 2007 revision to include all temporary interim amendments.			
Where applicable, the jacket and trouser will also comply with the California Code of Regulations, General Industry Safety Orders (CA OSHA).			
The awarded vendor must be within 70 miles of San Bernardino, California. The department will not accept any manufacturer were the clothing is not produced within the United States of America. NO EXCEPTIONS.			
The vendor has the option to offer multiple manufacturers as long as they meet the intent of the specification and submit their offers in separate proposal packages. The Department will not accept two different manufactures of the clothing on one proposal.			
CERTIFICATION AND THIRD PARTY TESTING The manufacturer must certify that the garments proposed in its bid meet or exceed all			

SPECIFICATIONS PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING		DOR PLIES
requirements of NFPA 1971. The manufacturer must also list and label this product with Underwriters Laboratories Inc. (UL) or Safety Equipment Institute (SEI), as the third party certification organization prescribed in NFPA 1971. All certification testing and test preconditioning must have been performed by an ISO 17025-certified laboratory. UL, SEI or a UL Authorized Client Test Data Program laboratory will fulfill this requirement.	YES	NO
Certification shall include, by definition, the scope of protection as follows: Jacket shall provide limited protection resistance to blood borne pathogens to the upper torso including the arms but excluding the head and neck interface area and the hand and wrist interface area. The pant shall provide limited protection resistance to the lower torso including the legs but excluding the foot and ankle interface area. The jacket and pant overlap shall provide limited protection resistance to the jacket/ pant interface area.		
BIDDER QUALIFICATIONS AND QUALITY ASSURANCE To assure that the protective jackets and trousers manufactured to this specification consistently meet established levels of quality control and, are constructed to this specification, the manufacturer of the jacket and trouser shall be certified to ISO Standard 9001. NO EXCEPTIONS.		
INTENT Where specific information is provided, it is done so to establish a minimum level of quality, design, and/or performance desired by the San Bernardino County Fire Department.		
It is not the intention of the San Bernardino County Fire Department, and participating agencies, to limit or restrict the use of alternate methods, materials or fabrication techniques to obtain a specific feature, however; where exceptions, deviations or alternate materials or construction features are to suggested by a manufacturer, a detailed written justification for each corresponding item that describes how that exception is equal to or greater than the item or feature specified.		
The San Bernardino County Fire Department and participating agencies retain the right to accept or reject any or all exception(s).		
Minor details of construction and materials where not otherwise specified are left to the discretion of the vendor, who shall be solely responsible for the design and construction.		
Each Vendor shall furnish satisfactory evidence of his ability to construct the clothing specified within a time frame provided by the proposal.		
The proposal pricing shall remain open for a period of twelve months from the awarded date. After the twelve month time span has elapsed, the award may be kept open for a maximum of three (3) years with an annual price increase based on the US Department of Commerce price index for similar products.		

SPECIFICATIONS PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING	VENDOR COMPLIES	
	YES	NO
BID SAMPLE AND ACCEPTANCE CRITERIA Bidders shall provide one sample garment set for each proposal submitted. Samples must be received inside the Procurement Section of the Purchasing Department prior to the bid opening. After the posting of the intended award on the Purchasing web site at www.sbcounty.gov/purchasing the non awarded vendors must retrieve sample garments within fourteen (14) working days. Samples not retrieved in the time period will be discarded. The final awarded sample will be retained throughout the contract period for comparison purposes. At the conclusion of the contract period the sample garment may be returned to the vendor or billed to the using Department at the original contract price at the discretion of the using Department.		
One (1) Turnout Jacket – Size 46" chest x 32" front/35" length back One (1) Turnout Pant – Size 38" waist X 30" inseam		
Due to Safety considerations the San Bernardino County Fire Department has the right to determine compliance to this specification. If, in the opinion of the San Bernardino County Fire Department, the bidder's proposal does not meet the intended specifications, the proposal will be rejected.		
BID SAMPLE ALTERATIONS The Department may require the intended awarded vendor to alter the sample set to meet the Departments requirements. The vendor shall have a maximum of 45 days to complete the alternations and return the sample set for re-evaluation. The vendor should be under the assumption the Department may require multiple alteration cycles in order to complete an acceptable garment set. By submitting the proposal the vendor agrees to this process. NO EXCEPTIONS.		
The vendor will be responsible for all costs associated with the sample set, including shipping.		
DELIVERY Jackets and trousers manufactured to this specification shall be shipped within 60-75 days upon receiving the order.		
Delivery will be to the San Bernardino County Fire Department, Service Center Facility at San Bernardino International Airport, 2824 East "W" Street, Building 302, San Bernardino, CA.		
DELIVERY INSPECTION All structural protective garments will be inspected before acceptance by an authorized representative of the San Bernardino County Fire Department for workmanship, appearance, and proper functioning of all components and conformance to all requirements of the proposal.		
Should deficiencies be found, it will be the responsibility of the supplier to repack and return the units in question, make necessary corrections or replacements, and return the units to the San Bernardino County Fire Department for re-inspection and acceptance.		

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	YES	NO
WARRANTY The manufacturer must provide a lifetime warranty against defects in materials and workmanship with the bid package.		
Manufacturer shall provide a written statement, with each garment, defining the conditions of the warranty.		
The vendor will be responsible for all transportation costs incurred during the contract and warranty period.		
LABELING REQUIREMENTS		
Each garment shall have a garment label(s) permanently and conspicuously attached stating at least the following language, as well as detailed warning instructions provided by the manufacture.		
Labels shall include the following information:		
 Manufacturer's name Manufacturer's garment identification number Date of manufacture 		
SizeFiber contents		
The label shall be attached to the inside liner pocket, approximately 8 ½" x 8 ½".		
CARE INSTRUCTIONS		
CARE INSTRUCTIONS The manufacturer shall provide a user information guide for the garments, which complies with user information requirements of NFPA 1971. Topics shall include, but not necessarily be limited to: pre-use information, preparation for use, inspection frequency and details, don/doff, use consistent with NFPA 1500, maintenance and cleaning, and retirement and disposal criteria and considerations.		
This written information shall be in complete compliance with NPFA 1971 requirements, and shall reference same.		
PATENT CONSIDERATIONS Seller agrees to defend Buyer at Seller's own expense, in all suits, actions or proceedings in which Buyer is made a defendant for actual or alleged infringement of any United States of America, Canadian or foreign letters of patent resulting from Buyer's use of the goods purchased as a result of this proposal. Seller further agrees to pay and discharge any and all judgments or decrees which may be rendered in any such suit, action or proceedings against Buyer.		
Seller agrees to indemnify and hold harmless the Buyer from any and all licenses, royalty and proprietary fees or costs, including legal costs, which may arise out of Buyer's purchase and use of goods supplied by the seller. It is expressly agreed by Seller that these covenants are irrevocable and perpetual.		

SPECIFICATIONS PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING		DOR PLIES
	YES	NO
TRACEABILITY PROGRAM The manufacturer shall have in place a computer maintained traceability program that provides for the assignment of a production control number to each garment. The traceability program must be capable of tracing the garment through production, from the bolts of cloth used in all three layers of the garment composite construction, to the assignment of the garment to the individual firefighter. This production control number shall be visibly located on the garment label and on other protected areas of garment.		
SIZING To ensure a perfect fit, sizing shall be based on actual measurements taken of the firefighter by a trained measurement specialist, or sizing garments, or both. Sizing measurements shall be taken according to a schedule and location(s) mutually agreed between the manufacturer and the department. Assistance shall be within 72 hours of request or as agreed.		
The jacket length shall be measured from the juncture of the collar and back panels to the hem of the jacket and shall measure 35 inches long with the front of the coat measuring 32 inches long.		
Garments shall be available in custom sizing as follows: jacket chest in 2-inch increments, jacket sleeve in 2-inch increments, jacket back length in 1-inch increments, pant waist in 2-inch increments and pant inseam in 2-inch increments.		
A full range of women's sizing, on women's patterns, must also be available.		
Each sleeve and inseam length shall proportioned from shoulder to wrist and from hip to ankle, to provide proper fit for individual arm and leg lengths.		
Neither Small-Medium-Large-Extra Large sizing nor women's garments cut to men's patterning are considered acceptable, since proper fit facilitates mobility and minimizes stress. NO EXCEPTIONS.		
FLAMMABILITY OF CONSITUENT MATERIALS Labels, bindings, hang-up loops and production labels shall be tested for flame resistance and shall comply with the requirements of NFPA 1971 Flame Resistance Test One for vertical flammability of cloth.		
HOOK AND PILE All references to Hook and Pile shall be flame resistant Velcro® (e.g. USA Velcro®) and black in color. All corners must be sewn to the garment without end curling.		
SELF BINDING The thermal liner-moisture barrier shall be stitched together and turned, then topstitched, to create a self-binding edge/hem.		
The method of sewing the thermal liner to the moisture barrier at the edges only and binding them together along the edges with a neoprene-jacketed cotton/polyester binding tape is prohibited. NO EXCEPTIONS		

SPECIFICATIONS PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING		DOR
THREAD	YES	NO
All thread used in structural seams shall be Nomex® of minimum Tex size T-70. Light colored garments and trim areas shall feature yellow thread.		
MAJOR A & B SEAMS Except for the collar Major A seam, which is single-needle lock stitched three times, all Major A & B seams (as defined by NFPA 1971) shall be double stitched, double feed throughout all three layers (outer shell, moisture barrier and thermal liner), and shall be made with Nomex® thread, Tex size T-90.		
Also, all moisture barrier seams shall be tape-sealed to meet all requirements of the NFPA 1971 Liquid Penetration Resistance Test. • For Outer Shell • For Thermal Liner • For Moisture Barrier		
MINOR SEAMS Most Minor seams, such as storm shields and mated hems, shall also be stitched with the specified Nomex thread.		
COMPOSITE PERFORMANCE The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Thermal Protective Performance (TPP) of not less than 35 when tested in accordance with the current edition of NFPA 1971 standard.		
The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Total Heat Loss (THL) of not less than 205 when tested in accordance with NFPA 1971 standard.		
The Heat Transfer Index rating shall be 25 seconds for the shoulder when measured at 2 psi (pounds per square inch) and 25 seconds for the knee when measured at 8 psi.		
POCKETS All pockets and flaps shall be reinforced at the top corners with bar tack stitching.		
All pockets shall be reinforced with an extra layer of NFPA-certified outer shell and fully lined with yellow Kevlar. The exact location of the reinforcements shall be identified in the custom options sections.		
All pockets shall have a means to drain water and shall have a means of closure. All pocket closures shall be made either with hook and loop fastener tape a minimum of 1.5 inches (3.8 cm) wide, with a flap, or with snaps.		
All pockets and pouches listed are to be designed with the same size listed. The department is not changing the sizes to meet each manufacturer's standard size. The sizes have been determined to meet our needs.		
TAILORED GRADING OF GARMENT LININGS Wherever garment linings are specified, including but not limited to thermal linings and		

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	YES	NO
moisture barriers, each such lining layer shall be tailor-graded to fit within the overall garment composite of all layers without causing bunching or binding when the garment is worn.		
METAL CONTACT PREVENTION There shall be no direct metal contact from the exterior of the outer shell through the moisture barrier/thermal liner to the wearer's body. This is intended to prevent a pathway for the conduction of heat to the skin, and shall apply to the use of all rivets, snaps, hooks, D's, zippers or any other metal used to fabricate the jacket.		
POINTS OF STRESS All points of stress shall be reinforced with sturdy bar tacks. Rivets are not acceptable because of their potential for rust and electrical or heat conduction. HIGH TEMPERATURE - MATERIAL REINFORCEMENTS Reinforcements shall be provided at cuffs and pockets and shall meet the requirements of NFPA 1971.		
For cuff reinforcements only: Manufacturer shall provide cuff reinforcements made of outer shell material at no additional cost. If the purchaser specifies reinforcements made of materials other than outer shell material, the manufacturer shall identify the additional cost for the specified material.		
For pocket reinforcements only: Any NFPA 1971-certified material may be used in the reinforcement of the pocket. If the purchaser requests specific NFPA 1971-certified materials for pocket reinforcements, the manufacturer shall identify the additional cost for the specified material.		
BREATHABILITY REQUIREMENT Excluding where required by NFPA standard, necessary for functionality, or specifically called out in the custom option sections, all materials used in the construction of the garments shall be breathable and all moisture barrier material must be as specified in the following materials section, or must be Crosstech.		
The breathability requirement includes but is not limited to: collar, chinstrap, storm shield, fly, water wells, front jacket facings, labels, and reinforcement cushioning where applicable.		
Areas where non-breathability is allowed: trim, hook and loop fastening, hardware or hardware backing, and external pocketing.		
CONDUCTIVE AND COMPRESSIVE HEAT RESISTANCE (CCHR) Using breathable materials as outlined in the section titled Breathable Materials, there shall be a minimum area of 4" x 4" (10.2 cm x 10.2 cm) at the shoulders and elbows that provide a minimum of 25 CCHR at 2 psi, and a minimum 6" x 6" (15.2 cm x 15.2 cm) area at the knees that provide 25 CCHR at 8 psi. All three compression areas shall be constructed of high temperature fiber based materials and sewn to the thermal liner on the inside of the liner toward the moisture barrier.		

SPECIFICATIONS DROTTOTIVE LACKET AND DANIES FOR STRUCTURAL FIRE FIGURING		DOR PLIES
PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING	YES	NO
APPLICABLE DOCUMENTS The following standards in their active versions on the date of invitation for bid shall form a part of this specification to the extent specified herein.		
STANDARD • ASTM D 6193-97 Standard Practice for Stitches and Seams		
NFPA 1500, 2002 Edition Standard on Fire Department Occupational Safety and Health Program		
NFPA 1851, 2001 Edition Standard on Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles		
NFPA 1971, 2007 Edition Standard on Protective Ensemble for Structural Fire Fighting		
SEALED MOISTURE BARRIER SEAMS All moisture barrier seams shall be sealed with a minimum 1-inch wide thermal sealing tape. One side of the tape shall be jacketed with a heat activated glue adhesive. The adhesive side of the tape shall be oriented toward the moisture barrier seam. The adhesive shall be activated by heat and the sealing tape shall be applied to the moisture barrier seams by means of pressure exerted by rollers for that purpose.		
JACKET CONSTRUCTION		
DESIGN CONCEPTS The Jacket style shall be of "Tails" design. The jacket shall be approximately 3 inches longer at the rear hem than at the front. Standard jacket lengths on the fronts shall be 32 inches and 35 inches in length on the back. The 3" tail drop shall be reinforced with an extra layer of outer shell material. If tail trim is used, it shall wrap to the underside of the tail.		
Garments shall feature a tailored three-piece body, one-piece back construction throughout the outer shell, moisture barrier and thermal liner layers. One-piece garments, either all layers or some layers, will not be considered acceptable since they cannot be tailored to hard-to-fit personnel. Similarly, garments with seams in mid-back are not considered acceptable because of backbone irritation that can occur with SCBA use. To facilitate individual tailoring needs, the major A & B seams joining the one-piece back to the right and the left front body panels, outer shell and all interior layers, shall be located at the most lateral position when the jacket is laid flat for inspection.		
Any references to left or right are to be viewed as though the garment is being worn.		
JACKET CERTIFICATION LABEL ON LINER The jacket certification label on the liner shall be attached to the inside right body panel.		

SPECIFICATIONS PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING		OOR PLIES
	YES	NO
LINER LABEL POCKET Each jacket shall have a liner label pocket measure approximately 8 ½" x 8 ½" sewn to the inside right body panel of the liner. The jacket certification label shall be heat sealed to the inside liner pocket. Labels for Cal OSHA shall also be included as part of the labeling.		
LINER ATTACHMENT The completed thermal liner-moisture barrier assembly shall attach by means of four (4) evenly spaced glove snaps to each outer shell front facing.		
The thermal liner-moisture barrier sleeves shall be attached at the outer shell cuff by means of one (1) snap for alignment and hook and loop and one snap at each sleeve end and hook and loop around each sleeve end.		
The thermal liner-moisture barrier shall attach to the collar with a continuous strip of 5/8" Pile Velcro on the liner and a continuous strip of 5/8" hook Velcro on the detached strip. An extra row of stitching shall be sewn into both strips of Velcro. The Velcro shall continue under the liner of the neck hem on each side to prevent any rough ends.		
The hook and loop Velcro shall be positioned so that the hook will not irritate the neck.		
The thermal liner-moisture barrier shall be attached and positioned in the jacket such that the hem falls within 1" of the hem of the outer shell. The bottom hem of the thermal liner-moisture barrier shall be attached to the jacket outer shell with six (6) glove snaps on 1 ½" straps to allow for flexibility of the liner with normal movement of the wearer.		
COLLAR Design shall be compatible with the outer shell so that the liner does not buckle, pull or otherwise restrict body motion. The left and right fronts of the moisture barrier/thermal liner shall be attached to the facings at the front closure of the outer shell. The neck of the moisture barrier/thermal liner shall be secured to the neck of the outer shell collar such that when donning the coat and arm may not be accidentally caught between the outer shell and its inner linings along the neck between the armholes. Liner shall have 2" wide, 2-ply CROSSTECH/NOMEX pajama check extension to tuck into pleat in outer shell collar.		
The collar shall be of three piece contoured 4-layer configuration such that when the collar is raised it shall remain standing while providing continuous thermal and moisture protection around the neck and face. To ensure this protection, the two layers of outer shell collar shall be fully lined with one layer of Gore RT7100 PTFE moisture barrier material and two layers of 1.5 oz. aperture E89 thermal liner. The collar shall provide proper interface with liner to insure no moisture penetration through the collar seam to inside of coat.		
The collar shall be contoured and shall completely cover the neck and throat area when in the raised position. Raised height shall be approximately four inches, with a contoured overlap at the front of the coat. Collar closure shall be provided by FR hook and loop 1.5"x4", with hook portion sewn on right side of collar, and loop portion sewn on left, set horizontal. Collar shall be of such design so as not to interfere with SCBA facemask, or helmet.		

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When examined prior to donning, the turned up collar shall completely wrap around the front of the neck opening such that left and right collars touch or overlap to maximize facial protection.	YES	NO
The three piece contoured 4-layer collar shall be sewn with a pleat on the innermost layer. Pleat shall have 3/4" FR hook sewn on the underside to engage the moisture barrier extension on the liner.		
The collar must be allowed to be folded down to lay flat on the shoulder when not turned up for fire protection. No abrasive ends shall be in contact with skin when the jacket is worn without the fire protective hood. The method in which the manufacturer attaches the liner to the collar will be reviewed with the sample set provided. The Department's request is to have the attachment of the liner at the base or below the collar.		
THROAT TAB The throat strap shall be of 4-layer configuration providing continuous thermal and moisture protection around the neck and face. The throat strap shall be mounted to the outer shell collar to ensure that when the coat is closed and the collar is raised, the throat strap shall prevent any opening between the left and right collar. To ensure this protection, the inside of the throat strap shall be fully lined with one layer of Gore RT7100 PTFE moisture barrier material and two layers of 1.5 oz. aperture E-89 thermal liner quilted to the innermost outer shell fabric layer for additional comfort. The outer most layer of the throat strap shall be outer shell material. The innermost layer facing the wearer's body shall be outer shell fabric.		
The throat strap shall be mounted to the outer shell collar 3.5" back from the collar facing and shall be not less than 11" long and 4" wide, contoured shaped to e compatible with the SCBA facemask and secured in the stowed position with 2"x2" FR loop on the left outside of the collar. 2"x2" FR hook shall be sewn to the end of the throat strap and 2"x4" corresponding FR loop shall be sewn to the outer shell material on the left side of the collar to provide maximum adjustment when wearing an SCBA breathing apparatus mask. The throat strap will close from the right to the left.		
SHOULDER CAPS The jacket shall include shoulder caps. Each cap shall attach under the collar and extend to the sleeve. Each cap shall be made of the same material and color as the outer shell. The shoulder caps are to cover the top seam of the jacket and also to provide a double layer on the shoulders.		
DRAG RESCUE DEVICE (DRD) Manufacturer shall supply an NFPA required and certified Drag Rescue Device with each jacket. The device shall be designed to fit each individual chest size. Each strap will be properly labeled with DANGER label, size and serial number.		
The Firefighter Recovery Harness shall be constructed of a one and one-half inch wide KEVLAR strap that shall be installed between the outer shell and the thermal liner. This harness shall have a hand loop (16" in circumference) that exits the outer shell through a 2" polymer coated aramid reinforced slot on the back of the coat just below the collar and is held in place by means of a piece of 1.5"x2" hook on the strap and a piece of 1"x2" loop		

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		NO
attached to the outer shell. This strap is then secured under a 2.25"x5.25" flap that is sewn in at the neck/ collar area. Two pieces 1"x2" loop shall be set vertically on the shell to align with two pieces of 1"x2" hook set vertically to the underside of the flap. The harness is also held in proper alignment by means of a 2"x2" piece of loop placed on the inside of the outer shell underneath the chest trim that corresponds to a piece of 1.5"x2" hook located on the harness. Two 1"x3.5" self-fabric straps with 1"x2" hook on one end and 1"x2" loop on other end shall be set to coat in the shoulder cap area to keep straps in proper position for use.	YES	-
Firefighter Recovery Harness provides mechanical leverage for dragging a downed and incapacitated structural firefighter from a life-threatening environment. The design of the harness enables the rescuer to drag the downed firefighter in line with the axis of the firefighter's skeletal frame, in order to decrease the risk of further injury.		
STORM FLAP A rectangular storm flap measuring 5" wide and 27" long shall be centered over the left and right body panels to ensure there is no interruption in thermal or moisture protection in the front of the jacket. The outside storm flap shall be constructed of two plies of outer shell material with a center ply of breathable moisture barrier material. The outside storm flap shall be double stitched to the right side body panel and shall be reinforced at the top and bottom with bar tacks.		
STORM FLAP AND JACKET FRONT CLOSURE SYSTEM The storm flap shall be constructed with a zipper and hook and Dee. The zipper shall be a 25" size #10 heavy duty High-temp brass zipper on the jacket fronts and hook and Dee rings on the storm flap. The teeth of the zipper shall be mounted on Nomex/Kevlar cloth and shall be sewn into the respective jacket facings. The zipper stop shall be "pressed", not molded, insuring the highest quality with increased durability. The storm flap shall close over the left and right jacket body panels and shall be secured by means of four non-ferrous inward facing hook and D rings. The D rings shall be secured to the leading edge of the storm flap with two rivets. The rivets shall be reinforced on the underside of the storm flap with a piece of Arafil material. The D rings shall be spaced along the storm flap. Four inward facing hooks shall be attached to the left front body panel with three rivets for each hook. The rivets shall be reinforced on the inside of the body panel with a single circular piece of Arafil material for each hook. The inward facing hooks shall be positioned in such a manner that they engage the D rings when the storm flap is closed over the front of the jacket.		
The zipper shall include a Black Arashield pull tab. The pull tab shall be doubled through the zipper and sewn in near the zipper loop. The doubled tab shall extend 3" past the zipper loop.		
HANG-UP LOOP An 80-pound tear strength hang-up loop shall be provided at the exterior just below the collar seam. The loop shall be constructed of triple layers of the specified outer shell material, lock stitched to the jacket. Webbing is not acceptable.		
RADIO MIC LOOP		

Sewn just above the hang-up loop shall be a small tab with Velcro end to secure the radio

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microphone cable to wrap around the backside of the collar. The Velcro will allow for a quick method to secure the cord in the loop.	YES	NO
INNER WRISTLET AND WATERWELL An internal wristlet shall consist of a 2-ply NOMEX Spandex knit not less than 8" in length. Wristlets shall be completely over the palm with a thumbhole to prevent the wristlets from sliding back. Wristlets shall be double stitched and bound to the moisture barrier/ thermal liner providing extended thermal and slash protection		
A combination of Semper Dri (3.0 oz. /sq. yd. Teflon treated Chambray (NOMEX spun face cloth quilted to araflo/E-89 and one layer of breathable CROSSTECH (Type 2C) moisture barrier leader shall be sewn no more than 1" back from the combination liner sleeve end. This leader shall be approximately 4" in length and end with a gathering of 1" elastic. This sleeve well shall prevent water and hazardous materials from entering the sleeve when arms are in a raised position.		
The combination liner sleeve ends shall be inserted into the outer shell sleeve ends by means of lining up the snaps then attaching the FR loop fastener of the combination liner sleeve end with the FR hook fastener of the outer shell cuff. This method of combination liner attachment shall prevent any gaps form occurring between the combination liner and sleeve well during a full range of motion. The combination liner shall extend to within 1" of the sleeve end.		
SLEEVE CUFF REINFORCEMENT The sleeve cuffs shall be reinforced with outer shell material. The cuff reinforcements shall be approximately 3" in width and folded in half outside the sleeve end for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the sleeve end.		
COMPOSITE MATERIALS Outer Shell		
7.0 oz. Nomex/Kevlar ripstop weave: 40% Nomex/60% Kevlar, EWR, Yellow.		
Thermal Liner 7.25 oz.; 3.5 oz./sq. yd. Glide (NOMEX filament/spun) face cloth quilted to virgin 50% para-aramid/50% meta aramid batting weighing approximately 3.75 oz./sq. yd.		
Moisture Barrier 5.0 oz.; Crosstech Bi-Component (PTFE) on a 3.2 oz. Nomex III.		
SCBA AIR MASK POCKET/ RADIO POCKET COMBO There shall be an oval shaped combination SCBA Air Mask Pocket and Internal Radio Pocket Combo on the right chest of the jacket, approximately four (4) inches down from the top shoulder seam.		
The SCBA Air Mask Pocket shall be large enough to accommodate the Department's SCBA air mask piece and radio. It shall be double stitched to the jacket. There shall be approximately a 19" double pull zipper, using a size #10 high-temp Vislon zipper as the closure that opens towards the center of the jacket. Each zipper shall include a Black		

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Arashield pull tab. Each pull tab shall be doubled through the zipper and sewn in near the zipper loop. The doubled tab shall extend 3" past the zipper loop. The SCBA Air Mask Pocket shall be constructed of outer shell material. The SCBA Air Mask Pocket shall have two brass grommets to allow for drainage. The SCBA Air Mask Pocket shall have trim and aligned to create a continuous band of trim at chest level as required by NFPA 1971 (latest edition). The SCBA Air Mask Pocket shall not be sewn onto the sleeve at all.		
The complete interior SCBA mask pocket shall be lined with a non-abrasive material to provide the lens. The Internal Radio Pocket opening shall be located at the top of the SCBA Air Mask Pocket and covered by a radio pocket flap. The Radio Pocket flap shall be constructed of two layers of outer shell material. The Radio Pocket flap shall measure approximately 8" long and fit to the interior dimensions of the pocket. The Velcro on radio pocket flap shall stop 1/2" from bottom edge of radio flap. The hook Velcro shall measure 1.5" x 3.5" and placed vertical. The Radio pocket flap shall be notched on both the right and left sides. A piece of loop-Velcro shall be sewn on the SCBA Air Mask Pocket and double stitched as to align with the hook-Velcro on the radio pocket flap. Two (2) Male snaps shall be placed vertically on the SCBA Air Mask Pocket only and one snap on the Radio pocket flap.		
The Internal Radio pocket shall be constructed of 7.5 oz. Yellow Nomex. The Internal Radio pocket shall measure approximately 7" x 3.5" x 2" and will not be lined. The Internal Radio pocket shall be sewn to the right front body panel of the jacket with the top opening of the Internal Radio pocket incorporated with the top of the SCBA Air Mask Pocket. Allowing a radio to be accessed without unzipping the SCBA Air Mask Pocket. • Pocket flap corners shall be angled. • Degree angle on all pockets.		
The placement of the pockets must work with the department supplied SCBA. Final design and location will be discussed and approved by the department before any production of any garments with awarded bidder.		
SECOND RADIO POCKET A second Radio Pocket shall be provided on the left chest approximately 7 to 8 inches down from the shoulder seam and constructed of outer shell material. The radio pocket flap shall be constructed of two layers of outer shell material. The radio pocket flap shall measure approximately 8" long and fit to the interior dimensions of the pocket. The Velcro on radio pocket flap shall stop 1/2" from bottom edge of radio flap. The hook Velcro shall measure 1.5" x 3.5" and placed vertical. The Radio pocket flap shall be notched on both the right and left sides. A piece of loop-Velcro shall be sewn on the Radio pocket and double stitched as to align with the hook-Velcro on the radio pocket flap. Two (2) Male snaps shall be placed vertically on the Radio pocket and one snap on the Radio pocket flap.		
The Radio pocket shall measure approximately 7" x 3.5" x 2" and lined with a moisture barrier material. The pockets and flaps shall be designed to hold the radios tight. The pocket shall be designed to hold the Bendix King, Motorola 800 STX, Motorola 800 MTS,		

SPECIFICATIONS PROTECTIVE JACKET AND DANIES FOR STRUCTURAL FIRE FIGHTING	VENI COMF	_
PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING	YES	NO
 and the Motorola XTS portable radios Pocket flap corners shall be angled. Degree angle on all pockets. 		
The placement of the pockets must work with the department supplied SCBA. Final design and location will be discussed and approved by the department before any production of any garments with awarded bidder.		
FLASHLIGHT STRAP The jacket shall be provided with two (2) Flashlight Straps. Both Flashlight straps shall be constructed of two layers of outer shell material, measuring approximately 1.5" x 11" and double bar tacked in the center of the strap, 2" apart from each bar tack along with a box stitch. Hook and Loop Velcro measuring approximately 3" long shall be sewn at opposite ends so that they may be joined together around the flashlight. The Velcro shall be placed a 1/2" over from the ends of strap. The Velcro shall be double stitched. The location of the two (2) Flashlight Straps shall be:		
First Flashlight Strap; Shall be sewn onto the left side placed directly below chest reflective trim - As close to leading edge as possible but not under the shield. The clip attachment for the light shall be directly above the reflective trim. The complete assembly adjacent of the radio pocket.		
Second Flashlight Strap; Shall be sewn onto the right side of the SCBA Air Mask Pocket placed adjacent to the first flashlight straps listed above.		
The placement of the flashlight straps must work with the department supplied SCBA. Final design and location will be discussed and approved by the department before any production of any garments with awarded bidder.		
BELLOW POCKETS Each jacket shall have an X-large half high bellows pocket, measuring approximately 8" high X 10" wide X 2" deep, constructed out of outer shell material. The X-large half high bellows pockets shall be double stitched onto each front body panel approximately a ½" from the jacket hem. Two (2) rust resistant metal grommets shall be installed in the bottom of each expansion pocket to facilitate drainage of water. The pocket flaps shall be rectangular in shape, constructed of two layers of outer shell material and shall measure approximately 4½" deep and approximately a ½" wider than the pocket. The pocket flaps shall close by means of hook and loop - Velcro and two (2) snaps.		
There shall be three (3) vertical strips of Velcro on the pocket flaps each measuring approximately $3\frac{1}{2}$ " x $1\frac{1}{2}$ ". There shall be one continuous Velcro strip sewn on the pocket horizontally near the top, measuring approximately 9" x $1\frac{1}{2}$ " long. The Velcro on the pockets and flaps shall stop a $\frac{1}{2}$ " from each end. Two (2) Female snaps shall be positioned on the pocket flap $2\frac{1}{2}$ " from each side of the flap. The two (2) Male snaps will correspond with the two female snaps.		
Each pocket shall be reinforced with Kevlar twill. The left bellows pocket shall include a		

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sewn in California tool Organizer, made of Kevlar material. • Pocket flap corners shall be angled. • Degree angle on all pockets.	-	
Each corner of the flap shall be cut at a 45 degree angle, 1 ½" long.		
The placement of the pockets must work with the department supplied SCBA. Final design and location will be discussed and approved by the department before any production of any garments with awarded bidder.		
MIC CLIP The Mic Tab shall be constructed strong enough to hold a microphone for a portable radio. It shall be bar tacked at the ends only, and constructed of two layers outer shell material. The mic tab shall measure approximately 1" x 3". The location of the Mic Tab is as follows: Eight Locations: 1. Right chest – 1" above the radio pocket flap 2. Right chest – 2 ½" above the flashlight strap on the SCBA Air Mask Pocket 3. Right chest – Just above the chest trim 4. Right bellow pocket – Just adjacent to the pocket flap, above lower trim. 5. Left chest – Just above the chest trim 6. Left chest – Placed on the radio pocket flap, 3" up from bottom edge of flap 7. Left chest – 1" below the shoulder seam, parallel to the right side tab. 8. Left bellow pocket – Just adjacent to the pocket flap, above lower trim.		
GLOVE RINGS Adjacent to each bellow pocket flap on the jacket shall be one (1) 1" diameter metal Dring attached to the jacket with a tab made of the same exterior material of the jacket. Each D-ring will be located on the inner area between the pocket and the flap closure approximately 1" from the pocket seam.		
SCOTCHLITE FLUORESCENT TRIM The reflective trim band shall be 3" Scotchlite II Lime/Yellow Triple Trim (L/Y borders with silver center). A Hi-Visibility trim pattern shall be used: one band around each sleeve 2" above the sleeve hem, one band sewn around the bottom of the jacket within approximately 1 inch of the hem, one band horizontally across the chest area just below the e arms and two vertical bands on the back (one on each side) beginning at the bottom trim of the jacket and extending up to the upper trim of the jacket, to create a box. The vertical bands of trim shall be positioned as close to the sleeve seam as possible. An additional band of Scotchlite II L/Y Triple Trim shall be sewn to the bottom hem of the tail and finished. The tail trim shall wrap up to the underside of the tail.		
USA FLAG The America flag shall be sewn on the upper left arm sleeve, approximately 2" below the shoulder/sleeve seam. The American flag shall measure approximately be 2½" x 3½". The field of stars will be on the left when looking at the flag.		
The American Flag shall meet the requirements for an NFPA-certified material made of cloth. Plastic materials will not be accepted.		

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	YES	NO
DEPARTMENT MARKING Each jacket shall be provided with the approved Fire Department markings: SBCoFD		
Yellow reflective 3M [™] reflective Scotchlite [™] flame resistant 3" wide x 1 ½" shall be sewn on the back of each jacket in the upper section.		
Final design and layout will be approved by the Department.		
REMOVABLE NAME PANEL Each jacket shall be provided a name panel made of the specified outer shell material and measuring approximately 3½" x 13" long. The letters shall be of a New Technology in a high heat transferring process using 2" letters transferred onto an outer shell panel. The 2" letters shall be of an approved font with a Silver base and an outline Black Blocking. The heat transferred letters/ink shall be durable enough to withstand routine cleanings with out losing the markings. The name panel shall be positioned just below the hem's trim centered on the back of the jacket. The name panel shall attach to the jacket tail with 1" hook and loop Velcro sewn around the perimeter of the name panel. A corresponding piece of Velcro shall be sewn on the jackets tail as to allow the department to switch out name panels between users. Names will be furnished by the department.		
PANTS CONSTRUCTION To avoid liability and interface problems, jackets and pants shall be procured from the same manufacturer.		
Any references to left or right are to be viewed as though the garment is being worn.		
DESIGN STYLE The pant shall be of a traditional waist-high-only design.		
The knee shall incorporate a comfort/mobility design in all layers. This design shall allow for a natural bending motion of the knee. The apex of the knee shall allow for not less than a 1.5" bellows at the center. The radial seam shall provide a gusset that the knee can fall into when crawling, climbing, bending, kneeling, etc The bottom of the mobile knee shall be placed not less than 10" from the cuff to fall anatomically correct.		
The waist of the pants shall be reinforced on the inside with 2-ply of outer shell fabric material not less than 1.5" in width. The pant waist shall be turned under to provide double material strength with the independent waistband, which shall then be double stitched to the outer shell.		
PATTERNING CONCEPT Garments shall feature a tailored four-piece outer shell with a two-piece moisture barrier and lining.		
COMPOSITE MATERIALS Outer Shell 7.0 oz. Nomex/Kevlar ripstop weave: 40% Nomex/60% Kevlar, EWR, Yellow.		

SPECIFICATIONS DESCRIPTIONS DESCRIPTIONS SPECIFICATIONS	VEN	
PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING	YES	NO
Thermal Liner 7.25 oz.; 3.5 oz./sq. yd. Glide (NOMEX filament/spun) face cloth quilted to virgin 50% para-aramid/50% meta aramid batting weighing approximately 3.75 oz./sq. yd.		
Moisture Barrier 5.0 oz.; Crosstech Bi-Component (PTFE) on a 3.2 oz. Nomex III.		
LINER LABEL The pant certification label on the liner shall be located right hip area. INSPECTION PORT - PANT LINER The pant thermal liner-moisture barrier system shall incorporate a Velcro inspection port on the right side fly seam area. This shall allow for field inspection of the "internal" condition of the: moisture barrier membrane, moisture barrier seam sealing, thermal insulating layer and quilt stitching.		
SUSPENSION BUTTONS Eight (8) heavy duty, rust-resistant suspender buttons shall be positioned around the waist. Suspender buttons shall be mounted through the waistband of outer shell material that is internally reinforced or backed with an additional piece of Arafil material.		
Suspender button shall be on 2" centers.		
LINER ATTACHMENT/WAISTBAND FLAP The waistband of the pants shall be reinforced on the inside with two (2) ply Nomex outer shell material, approximately 1.5" in width. The waistband shall be turned under to provide double material strength with the independent waistband double stitched to the outer shell and the two end of the waistband bar tacked to the outer shell. The thermal liner-moisture barrier shall be attached with the use one continuous circumferential strip of 5/8" Hook Velcro on waistband - 5/8" Pile Velcro on thermal liner-moisture barrier.		
Pant leg thermal liner-moisture barrier shall fall within 2" of the outer shell leg hem.		
FLY FRONT An inward facing snap hook shall be riveted to the right front body panel in the waist area backed by a piece of jacketed needle punch aramid material. A D ring shall be riveted to the leading edge of the fly flap near the top. The D ring shall be backed by a piece of jacketed needle punch aramid material. The snap hook shall engage the D ring located on the fly flap when in the closed position. Both the D ring and snap hook shall be positioned 1" down from the top of the waistband and be in position to engage a safety hook when the fly flap is in the closed position.		
The fly flap shall be constructed of two pieces of outer shell material. A center ply of moisture barrier shall be sandwiched between the two outer shell pieces. The fly flap shall be double stitched to the left front body panel beginning at the waist and extending down to a depth of approximately 12". The fly flap shall be approximately 5" wide at the top, and approximately 1.5" wide at the crotch where it will be further reinforced with a bar tack set as low possible forming an X for added strength. The fly flap shall have a 2" wide piece of Velcro double stitched along the full length of the fly		

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SPECIFICATIONS PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING		VENDOR COMPLIES	
flap. Two snaps shall also be incorporated into the fly, one positioned directly below the D ring and one centered in the middle of the fly. The snaps shall not be in the Velcro.	YES	NO	
TAKE UP STRAPS The trousers shall be equipped with two take up straps. Two waist straps shall be sewn and bar tacked 2 ½" down from the top of the waistband. One strap shall be installed on the right side and one on the left side constructed out of one piece of shell material folded to two layers and sewn to form a 1" wide strap. The back strap shall be a minimum of 10" in length and shall be affixed to the pant by means of two bar tacks approximately 1/2" apart. The front take up straps shall have a 5/8" nickel plated postman style slide buckle which shall be threaded through the five inch in length strap folded to form two layers and affixed by means of two bar tacks 1/2" apart. The strap is sewn to form an attachment strap approximately 2 1/2" in length designed for quick take up adjustment.			
BELLOW POCKETS Each pant shall have two (2) half high bellow pockets, measuring approximately 8" high X 8" wide X 2" deep, constructed out of outer shell material. The pockets shall be located on the side of each leg centered over the out seam and positioned to provide accessibility. The half high bellow pockets shall be double stitched in positioned so there is no interference with body movement while performing fire fighting duties and wearing a turnout jacket. The top edge of the pockets shall be sewn 19" down from the top of the waistband, on the front thigh. Two (2) rust resistant metal grommets shall be installed in the bottom of each expansion pocket to facilitate drainage of water. The pocket flaps shall be rectangular in shape, constructed of two layers of outer shell material and shall measure approximately 4½" deep and approximately a ½" wider than the pocket. The pocket flaps shall close by means of hook and loop - Velcro and two (2) snaps.			
There shall be two (2) vertical strips of Velcro on the pocket flaps each measuring approximately 3½" x 1½" with two (2) pieces of Velcro measuring approximately 1½" x 1½" pieces on the pocket. The Velcro on the pockets and flaps shall stop a ½" from each end. Two (2) Female snaps shall be positioned on the pocket flap 1½" from each side of the flap. The two (2) Male snaps will correspond with the two female snaps.			
Each pocket shall be reinforced with Kevlar twill. The left bellows pocket shall include a sewn in California tool Organizer, made of Kevlar material. • Pocket flap corners shall be angled. • Degree angle on all pockets.			
RADIO POCKET A Radio Pocket shall be provided on the right side, just behind the leg seam. The Radio Pocket shall be position 4 ½" down from the top of the waist band. The radio pocket flap shall be constructed of two layers of outer shell material and measure approximately 8" long and fit to the interior dimensions of the radio pocket. The Velcro on radio pocket flap shall stop 1/2" from bottom edge of radio flap. The hook Velcro shall measure 1.5" x 2.5" and placed vertical. The Radio pocket flap shall be notched on both the right and left sides. A piece of loop-Velcro shall be sewn on the Radio			

VENDOR SPECIFICATIONS COMPLIES PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING YES pocket and double stitched as to align with the hook-Velcro on the radio pocket flap. Two (2) Male snaps shall be placed vertically on the Radio pocket and one snap on the Radio pocket flap. The Radio pocket shall measure approximately 7" x 3.5" x 2", constructed out of outer shell material. The pockets and flaps shall be designed to hold the radios tight. The pocket shall be designed to hold the Bendix King, Motorola 800 STX, Motorola 800 MTS, and the Motorola XTS portable radios Pocket flap corners shall be angled. Degree angle on all pockets. Final design and location will be discussed and approved by the department before any production of any garments with awarded bidder. **PAGER POCKET** One (1) pager pocket shall be provided on the right side, front area of the pant. The Pager Pocket shall be position 41/2" down from the top of the waist band and placed adjacent to the radio pocket on the right side seam. Positioned not to interfere with bellow pocket. The pocket flap shall measure approximately 3" long and fit to the interior dimensions of the pager pocket. Hook and loop Velcro shall be used as a means of the flap closure. The Pager pocket shall measure approximately 4" x 3" x 1½" and shall be constructed out of outer shell material. Pocket flap corners shall be angled. • Degree angle on all pockets. Final design and location will be discussed and approved by the department before any production of any garments with awarded bidder. **MAG LIGHT HOLDER** A 2" metal ring shall be used to hold a Mag light on the pants. A tab constructed of 2 layers of outer shell material shall be folded in half to hold a 2" ring. The tab shall measure approximately 1½" wide and shall be bar tacked and box stitched. The Mag Light Holder shall be position 4 1/2" down from the top of the waist band and placed immediately behind the left side seam on the left rear panel. REINFORCED CUSHIONED KNEE There shall be two removable padded knee patches, comprised of a stronger nonabrasive material. The padding shall be stitched on to the material in a guilted pattern. The method of stitching shall not reduce the protection of the kneepad. The design and attachment of the kneepad shall allow additional padding to be installed by each individual when needed. The material to be used along with the warranty must be listed in the bid. Replacement kneepads must be provided to the Department.

SPECIFICATIONS		DOR PLIES
PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING	YES	NO
The knee pad attachment shall be approved by the department.		
SUSPENDERS		
One pair of suspenders will be supplied with each garment.		
The Department must approve the suspenders proposed. Each bidder is requested to submit several different suspenders with the sample set of gear.		
ANGLED CUFF The rear portion of each leg hem shall be notched in an area of approximately 8" wide x 1½" high to help prevent the hem from catching on the heels of the firefighters boots or dragging on the ground. All three layers of the leg materials (outer shell, moisture barrier and thermal liner) must be angled so as to prevent the thermal liner-moisture barrier from being compromised due to exposure.		
Each hem will be reinforced with one layer of outer shell material and double stitched to reduce ripping of the hem during use.		
PANT CUFF REINFORCEMENT - 360° The pant cuffs shall be reinforced with outer shell material. The cuff reinforcements shall be approximately 3" in width and folded in half outside of the bottom leg hem for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the bottom leg hem.		
Each portion of the Angled Cuff shall also be reinforced with one layer of outer shell material and double stitched.		
PANT CUFF TIGHTENERS At the bottom of each pant leg, approximately 4" up shall be a cuff tightener. The cuff tighteners shall be constructed of outer shell material consisting of a tab and a strap with 4 male snaps. The tab shall measure approximately 1" x 3.5" and include one single female snap centered on the tab. A strap shall measure approximately 1.5" x 9.75" long and shall be sewn at one end of the strap positioned 1" forward of the side seams. This strap shall have 4 male snaps. The first male snap shall be installed in alignment with the female snap in a normal position that allows the cuff to lay flat when on a flat inspection surface. This male snap shall be positioned at 3" from the loose end of the strap. The remaining 3 snaps shall be positioned along the strap at 4.5", 6.5" & 8.5" from the loose end.		
REFLECTIVE TRIM Each pants shall have a band of reflective trim encircling each leg below the knee to comply with the requirements of NFPA 1971, 2007 edition in 3" Scotchlite II Lime/Yellow Triple Trim (L/Y borders with silver center).		
Optional equipment items including installation costs shall be priced separately to allow the Department to make knowledgeable decisions.		
Vendors may list out other features and options that may better suit the department's needs. Each must be listed out with a price or cost savings to be considered. Each		

SPECIFICATIONS PROTECTIVE JACKET AND PANTS FOR STRUCTURAL FIRE FIGHTING	VENI COMF	PLIES
option must have a detailed description as to the type of item, material and special accessories. Each option listed must not lower the general safety ratings or usage of this specification. It is not the intention of the department to lower the integrity or compromise the jacket or pants by accepting or deleting an option. The intention is to identify options each manufacturer may have to improve the integrity at a lower cost.	YES	NO

PROPOSAL SHEET

Structure Jacket	\$	each
Structure Pant	\$	each
Options:		